## **NWS Virtual Lab**

Connecting People – Enabling Innovation

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NOAA Testbed and Proving Ground Workshop April 17, 2014



#### **NWS VLab**

is a set of services and IT framework which enables NWS employees and their partners to share ideas, collaborate, engage in software development, and conduct applied research.



#### The Goal of VLab

is to manage innovation, streamline O2R, and accelerate R2O in NOAA.



#### **VLab Communities**

allow users with common interests to collaborate using tools like forums, blogs, wikis, document libraries, web forms, and workflows.



### VLab Development Services

provide users with integrated project management, issue tracking, software repositories, continuous integration, and code review tools.

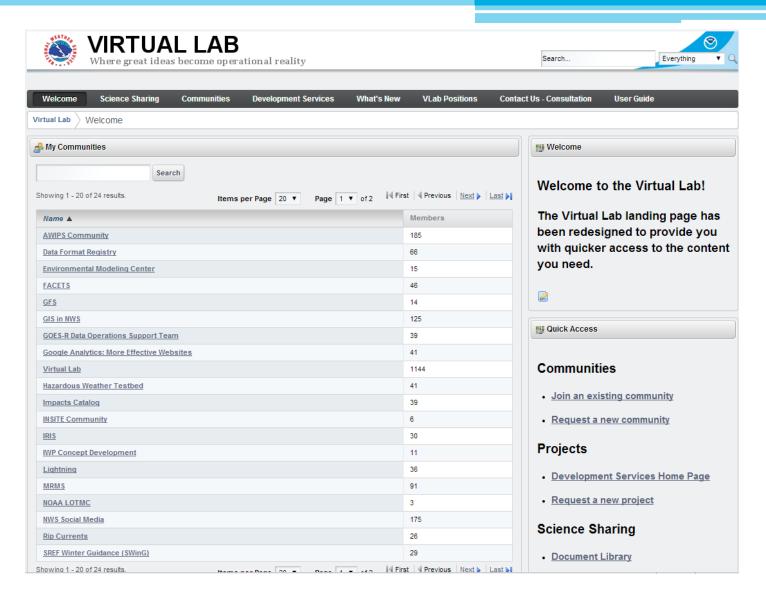








**Project** 



https://nws.weather.gov/innovate/

Search... Everything •

#### **AWIPS Community**

Home Projects Deployments Installation TechDocs Data Library Governance Forums

Virtual Lab AWIPS Community Home

#### Welcome to the AWIPS Virtual Community

The purpose of this website is to provide an on-line collaboration space for the community of users, software developers, and researchers involved in the Advanced Weather Interactive Processing System.

The site is organized into the functional areas described below. Features, such as Wiki's, Blogs, and Databased information (known in Liferay as "Dynamic Data Lists" or DDLs) are used across the functional areas to foster interaction and accumulate knowledge into the site.

Projects Listing of current active AWIPS-II development projects. In addition to

providing a central access point, this page includes Summary and Status information culled from VLab Redmine Project Pages, as well as

request forms for access to and creation of new projects.

Deployments Listing of AWIPS-II deployments. Including location, mission use,

configuration, version, and currently hosted special applications/plugins

and ATANs

Catalog

Application [Under construction.] Listing of AWIPS-II applications, including

summaries, development status, description of input data, mission use,

and links to documentation.

Installation This page will someday be the foundation of all knowledge regarding

installation of AWIPS-II (at which time the moderator will change this text) Includes Wiki based documentation and instructions for installing on various configurations, as well as guidance for how to select/size

appropriate hardware for a given mission context.

Governance Everything one needs to know about getting code into the AWIPS-II

baseline. Process descriptions, Documentation requirements, request

forms, and more.

TechDocs Wiki-based community compiled technical documentation for the

AWIPS-II software application.

Data A collection of the various data types handled by AWIPS-II, including

links to documentation, data sources, format descriptions, and points of

contact



Search..

Everything



Use this

community tool

Document Library

Wiki

Forums

Blogs

Home EWP2014 MRMS-SBPE

**Forums** 

**Blogs** Wiki **Document Library** 

**Developer Collaboration** 

**Experimental Data Sources** 

**MRMS Products** 

■ How To?

**Bibliography** 

The following table gives a quick guide to this community's tools, easily accessed via the

navigation bar at the top of the page.

If you want to

Add or modify collaborative

Start or contribute to a

Upload or download a

Share your expertise

documentation

discussion

document

Virtual Lab

MRMS

Home

#### **MRMS**

#### Multiple-Radar / Multiple-Sensor

**Applications for Hydrometeorological Warning Decision Making** 



Aviation Routing, Convection, Turbulence, Icing (AWC, CWSUs, FAA)







MRMS Project Charter - This document establishes the Multi-Radar Multi-Sensor (MRMS) system Implementation Project within the National Oceanic and Atmospheric Administration (NOAA) Next-Generation Air Transportation System (NextGen) Weather Program. This project will implement the MRMS system, currently running experimentally at NSSL and at the Federal Aviation Administration's (FAA's) William J. Hughes Technical Center, into National Weather Service (NWS) operations. The document has been officially signed.

MRMS LOTP Decision Briefing December 2010 - PowerPoint presentation that was given to OS&T and NCEP Directors in December 2010, recommending that the MRMS system be accepted as a NOAA Line Office Transition Project (LOTP).

MRMS information on the NSSL Web Pages - a broad overview.



#### MRMS-QPE

MRMS-Hydro Product Description Wiki

MRMS-QPE Summit Priorities

NWS QPE Blog



Experiment (MRMS-SBPE)

MRMS-Severe

MRMS-Severe Product Description Wiki

EWP2014 MRMS-Severe Best Practices

Experimental Warning Program (EWP) Blog

MRMS-Aviation

MRMS-Aviation Product Description Wiki



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What's New?

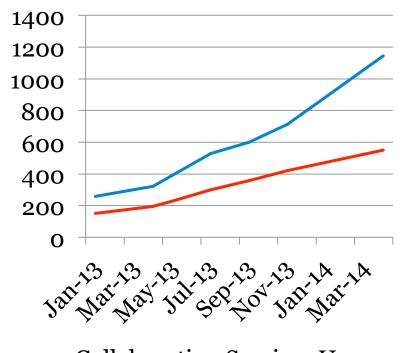
MRMS User Group and Core Edit

MRMS-Severe: Field: Ray Wolf (DVN), Pat Spoden (PAH), Ron Przybylinksi (LSX), Kevin Brown (OUN), Alex Occasid (TAN), Talebe Believe (EEO), Este

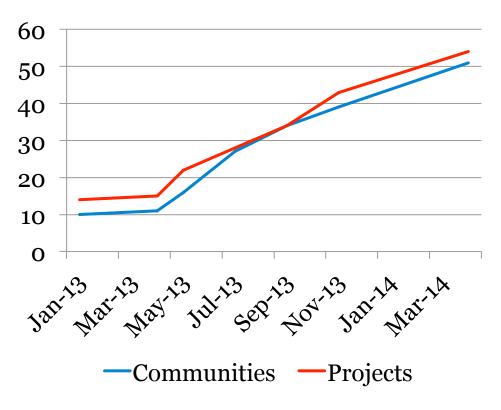
# Projects - a sampling

- AWIPS Hazards Services
- OHD CHPS
- GOES-R TOWR-G
- Iris
- Impacts Catalog
- MOS/EKDMOS/LAMP
- National Model Blender
- Storm Surge
- mPing
- FACETs PHI
- NOAA Weather Wire

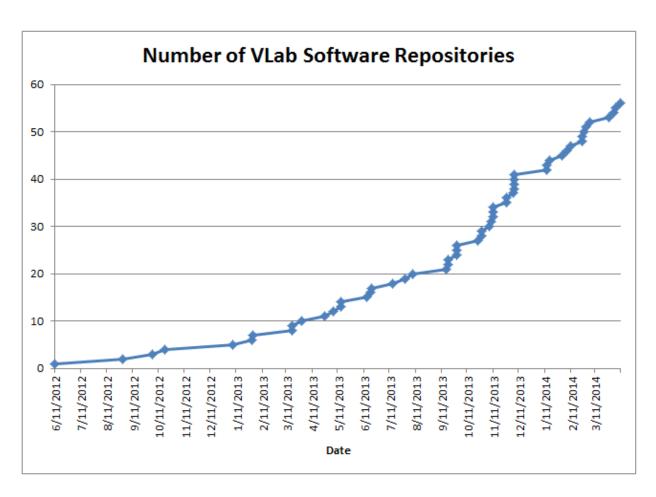
## Growth of VLab



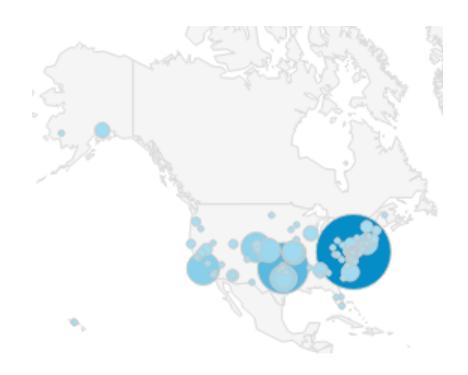
- —Collaboration Services Users
- —Development Services Users



## **Growth of VLab**



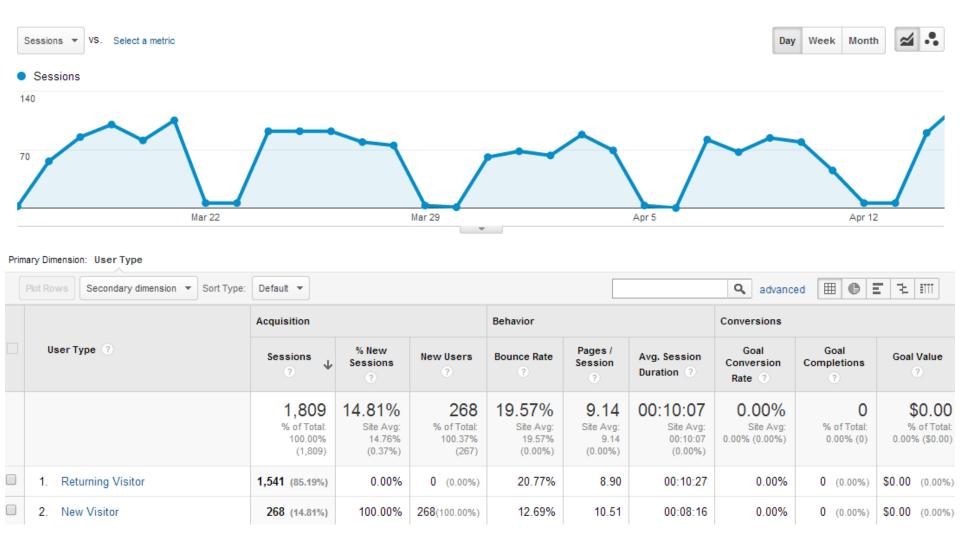
# VLab Usage - Geographical Distribution



# VLab Development Services - Usage

City ?	Acquisition	Acquisition			Behavior		
	Sessions 🗸	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration ?	
	1,809 % of Total: 100.00% (1,809)	14.81% Site Avg: 14.76% (0.37%)	268 % of Total: 100.37% (267)	19.57% Site Avg: 19.57% (0.00%)	9.14 Site Avg: 9.14 (0.00%)	00:10:07 Site Avg: 00:10:07 (0.00%)	
Silver Spring	664 (36.71%)	15.81%	105 (39.18%)	19.13%	10.28	00:09:52	
2. Boulder	136 (7.52%)	10.29%	14 (5.22%)	20.59%	10.01	00:11:00	
3. Aurora	90 (4.98%)	3.33%	3 (1.12%)	16.67%	5.74	00:09:32	
4. Arroyo Grande	88 (4.86%)	1.14%	1 (0.37%)	7.95%	12.17	00:22:54	
5. McKinney	82 (4.53%)	3.66%	3 (1.12%)	32.93%	4.24	00:04:41	
6. College Park	81 (4.48%)	14.81%	12 (4.48%)	16.05%	8.77	00:06:33	
7. Ashburn	81 (4.48%)	4.94%	4 (1.49%)	13.58%	11.20	00:18:41	
8. Pleasant Hill	77 (4.26%)	29.87%	23 (8.58%)	12.99%	7.27	00:09:45	
9. Goodland	67 (3.70%)	38.81%	26 (9.70%)	11.94%	6.18	00:06:41	
10. Chantilly	36 (1.99%)	11.11%	4 (1.49%)	19.44%	11.97	00:10:44	

## VLab Development Services - Usage

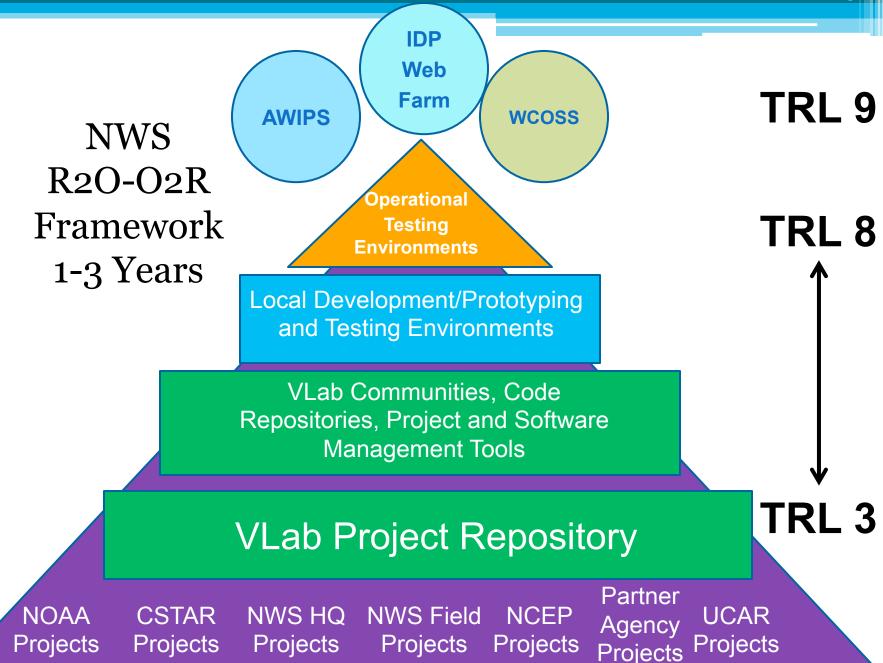


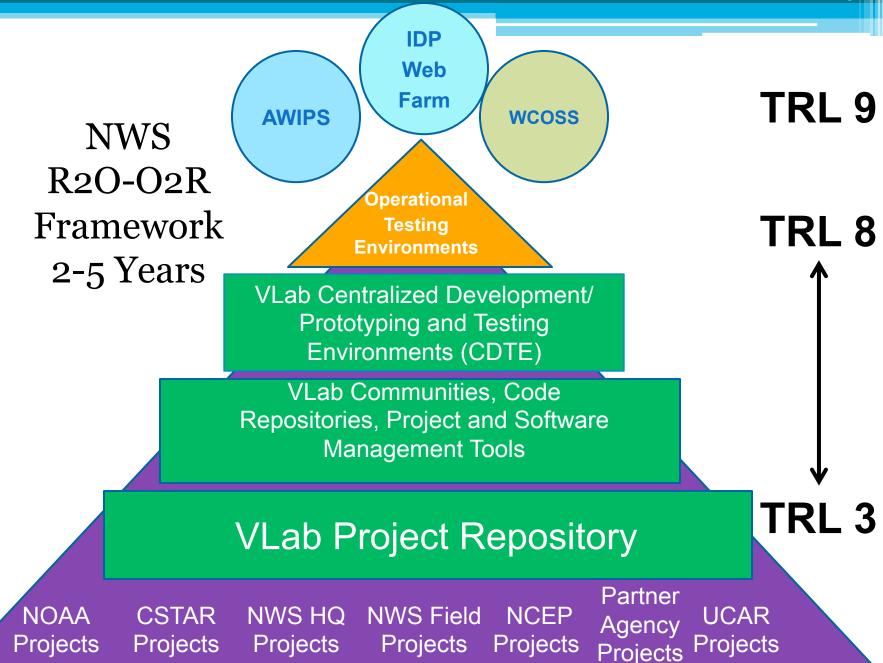
# Accomplishments

- VLab Support Team established
- VLab Consulation Services initiated
- VLab Adjunct Staff
  - Mark Fenbers , OHRFC
  - Cory Rusher , WFO STL
  - John Carrick, NTWC
- Monthly VLab Focal Point meetings
- VLab Forum seminar series
- VLab is the official source of the AWIPS-II Baseline
- VLab AWIPS Community is the official source of all AWIPS documentation
- Starting with AWIPS Build 14.3.1, all AWIPS development organizations will follow the new VLabbased development and integration process.

# Upcoming

- VLab Project Repository
- Quarterly Requirements Reviews
- OpenID sign-on via Google acct
- Rehosting VLab in IDP Web Farm
- Begin planning for VLab CDTE





# So NOAA Testbeds and Proving Grounds Get Involved! Start Something New in VLab!

**QUESTIONS?**